

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference P13126/MA | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/EP 03/2482 | International filing date (day/month/year) 07.11.2003 | Priority date (day/month/year) 07.11.2002 |
| International Patent Classification (IPC) or both national classification and IPC H04Q7/38 | | |
| Applicant SONY ERICSSON MOBILE COMMUNICATIONS AB ET AL. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

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|---|---|
| Date of submission of the demand 01.06.2004 | Date of completion of this report 04.03.2005 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | Authorized Officer De la Cruz Valera, D Telephone No. +31 70 340-4541  |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP 03/12482

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-6 as originally filed

Claims, Numbers

1-28 received on 20.08.2004 with letter of 18.02.2004

Drawings, Sheets

1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/12482**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-28 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-28 |
| Industrial applicability (IA) | Yes: Claims | 1-28 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The following documents (D1-D3) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: US 2001/005171 A1 (FARRINGDON JONATHAN ET AL) 28 June 2001 (2001-06-28)

D2: WO 02 076136 A (STROEM PATRIK ;TELEFONAKTIEBOLAG L M ERICSSON (SE)) 26 September 2002 (2002-09-26)

D3: WO 02 076118 A (SIGNALSOFT CORP) 26 September 2002 (2002-09-26)

2. The present application does not meet the requirements of the PCT, since the subject-matter of independent claims 1 and 14 does not involve an inventive step in the sense of Art. 33(3) PCT.

- 2.1. D1 is regarded to be the closest prior art cited in the search report. To Claim 1, it discloses (references in brackets applying to D1), a device for generating an alert(Paragraph 011), comprising positioning means for updating and storing an actual position of the device (Par. 0010. The position is necessarily stored, since the actual position is compared with the alert triggering positions. Storing is a general concept that doesn't exclude any particular type of register), along with
 - location storage means for storing the location of places of interest (Par. 0009)
 - means for storing a request for an alert signal associated with the location of a place of interest (Par. 0008, 0009)
 - trigger means for comparing the actual position of the device with the location of a place of interest and triggering generation of said alert signal when the distance between the actual position of the device and the location of a place of interest is less than a predetermined value (Par. 0013, 0042).

Claim 1 differs from the cited prior art in merely that the positioning means is arranged to update the actual position of the device every time the device has moved a distance. This feature is not clear, insofar it is not devisable how the positioning

means can update the position when the position has changed a distance. Either it's the evaluation of the alert information the one updated, or the visualisation of the position which is put to date. In either case, neither of these options (not unambiguously disclosed, in any case, so unacceptable under the provisions of Arts. 28(2) and 34(2) concerning added subject matter) would involve an inventive step, since the person skilled in the art would consider recalculating the location dependent information and reconsidering the alerts upon a given change in position as a normal design procedure.

The optional feature (*for instance 100 metres*) does not incorporate any restriction to the scope of the claim whatsoever, and could not be regarded as inventive even if incorporated unconditionally. It merely reflects a design option.

The subject matter of claim 1 does not involve an inventive step. It is to be noticed that a similar analysis could be undertaken, using D2 -which uses the telephone network for assessing the position. See references cited in the search report- as a basis for the assessment, and arriving at the same conclusion.

- 2.2. Independent claim 14 details the corresponding method, being the features present analogous. It can neither be regarded as fulfilling the inventive step requirement as set forth in Art 33(3) PCT.
- 2.3. The subject matter represented by the features of dependent claims 2 to 13, 15 to 28 in combination with the claims they refer to, does not involve an inventive step as required by Art 33(3) PCT. The subject matter in claims 2-6,9-19 22-26 is already disclosed by D1 and/or D2 alone. They do not fulfil the inventive step requirement. See hereto relevant passages cited in the search report. The subject matter of claims 7, 8, 20 and 21 cannot be regarded as involving any inventive step. The features claimed are a matter of normal design procedure when it comes to update positioning data, see for example document D3 and its citations from the search report. Its inclusion in the alert system and method described in document D1 would therefore be an obvious design possibility for the skilled person in order to solve the problem posed. similarly, Claims 27 and 28 only reflect well known positioning technologies and applications of these kind of system, whose use is also disclosed by D3.

20. 08. 2004

CLAIMS

(94)

1. A device for generating an alert signal comprising:
positioning means for updating and storing an actual position of the device;
comprising:
5 location storage means for storing the location of a place of interest;
means for storing a request for an alert signal associated with the location of a
place of interest; and
trigger means for comparing the actual position of the device with the location
of a place of interest and triggering generation of said alert signal when the
10 distance between the actual position of the device and the location of a place of
interest is less than a predetermined value (r); **characterised** in that
the positioning means is arranged to update the actual position of the device
every time the device has moved a distance, for instance 100 meters.
- 15 2. A device according to claim 1, **characterised** in that the predetermined value
(r) is variable, and may be set individually for each request for an alert signal.
3. A device according to claim 1 or 2, **characterised** in that the location storage
20 means includes a personal map program.
4. A device according to claim 1, 2 or 3, **characterised** in that the location
storage means includes a browser for finding locations on a telecommunications
network.
- 25 5. A device according to claim 4, **characterised** in that the browser is a WAP
browser for finding locations on the Internet.
6. A device according to any one of claims 1 to 5, **characterised** in that the
30 positioning means further is arranged to update the actual position of the device
every time the device changes base station.
7. A device according to any one of claims 1 to 6, **characterised** in that the
positioning means further is arranged to update the actual position of the device
35 at regular time intervals.
8. A device according to any one of claims 1 to 7, **characterised** in that the
positioning means further is arranged to update the actual position of the device
in dependence of the speed of the device.

9. A device according to any one of the preceding claims, **characterised by** further comprising:
calendar means for storing calendar entries;
5 clock means for keeping track of the actual time;
further trigger means for comparing the actual time with a calendar entry and triggering generation of said alert signal when the actual time matches the calendar entry, but only when the distance between the actual position of the device and the location of a place of interest is less than the predetermined value
10 (r).
10. A device according to claim 9, **characterised in that** the calendar entry matches the actual time once only.
- 15 11. A device according to claim 9, **characterised in that** the calendar entry matches the actual time repeatedly for a specified time unit, such as day/week/month/year.
12. A device according to any one of the preceding claims, **characterised in that**
20 the positioning means comprises a GPS receiver.
13. A device according to any one of the preceding claims, **characterised in that** the device is a portable telephone, a pager, a communicator, a smart phone, a positioning device or an electronic organiser.
25
14. A method for generating an alert signal in a device comprising the steps of:
updating and storing an actual position of the device;
storing the location of a place of interest;
storing a request for an alert signal associated with the location of a place of
30 interest; and
comparing the actual position of the device with the location of a place of interest and triggering generation of said alert signal when the distance between the actual position of the device and the location of a place of interest is less than a predetermined value (r);
35 **characterised by the further steps of:**
updating the actual position of the device every time the device has moved a distance, for instance 100 meters.
15. A method according to claim 14, **characterised in that** the predetermined

value (r) is variable, and is set individually for each request for an alert signal.

16. A method according to claim 14 or 15, **characterised** in that the location storage is supplied by means of a personal map program.
- 5 17. A method according to claim 14, 15 or 16, **characterised** in that the location storage is supplied by means of a browser for finding locations on a telecommunications network.
- 10 18. A method according to claim 17, **characterised** in that the browser is a WAP browser for finding locations on the Internet.
19. A method according to any one of claims 14 to 18, **characterised** in that the actual position of the device further is updated every time the device changes
15 base station.
20. A method according to any one of claims 14 to 19, **characterised** in that the actual position of the device further is updated at regular time intervals.
- 20 21. A method according to any one of claims 14 to 20, **characterised** in that the actual position of the device further is updated in dependence of the speed of the device.
22. A method according to any one of claims 14 to 21, **characterised** by the
25 further steps of:
storing calendar entries;
keeping track of the actual time;
comparing the actual time with a calendar entry and triggering generation of said alert signal when the actual time matches the calendar entry, but only when the
30 distance between the actual position of the device and the location of a place of interest is less than the predetermined value (r).
23. A method according to claim 22, **characterised** in that the calendar entry matches the actual time once only.
- 35 24. A method according to claim 22, **characterised** in that the calendar entry matches the actual time repeatedly for a specified time unit, such as day/week/month/year.

25. A method according to any one of claims 14 to 24, **characterised** in that the step of updating and storing the actual position of the device comprises receiving GPS signals.
- 5 26. A method according to any one of claims 14 to 24, **characterised** in that the step of updating and storing the actual position of the device comprises receiving position information from a mobile telecommunication network.
- 10 27. A method according to claim 26, **characterised** in that the mobile telecommunication network uses EOTD (Enhanced Observed Time Difference) or OTDOA (Observed Time Difference On Arrival).
- 15 28. A method according to any one of claims 14 to 27, **characterised** in that the device is a portable telephone, a pager, a communicator, a smart phone, a positioning device or an electronic organiser.